

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-12 (canceled)

Claims 13-18 (withdrawn)

Claim 19 (canceled)

Claim 20-29 (canceled)

30. (new) An organic field effect transistor (OFET), comprising:

a gate dielectric layer on a substrate, said gate dielectric layer comprising at least one silsesquioxane precursor oligomer having phenyl pendant groups, and wherein said substrate is coated with indium tin oxide.

31. (new) The OFET recited in Claim 30, wherein said substrate comprises polyethylene terphthalate.

32. (new) The OFET recited in Claim 30, further comprising:

a gate electrode on said substrate, wherein said gate dielectric is on said gate electrode;

an organic semiconducting layer on said gate dielectric layer; and

a source electrode and a drain electrode in contact with said organic semiconducting layer.

33. (new) The OFET recited in Claim 32, wherein said substrate comprises polyethylene terphthalate.

34. (new) The OFET recited in Claim 30, further including another silsesquioxane precursor oligomer having methyl pendant groups.

35. (new) The OFET recited in Claim 30, further including another silsesquioxane precursor oligomer having dimethyl pendant groups.

36. (new) The OFET recited in Claim 30, wherein said silsesquioxane precursor oligomer is an alkyl(methyl)phenyl oligomer.

37. (new) An organic field effect transistor (OFET), comprising:
a gate dielectric layer on a substrate, said gate dielectric layer comprising at least one silsesquioxane precursor oligomer having phenyl pendant groups and wherein said gate dielectric layer is a silane-reagent treated layer.

38. (new) The OFET recited in Claim 37, wherein said silane reagent is selected from the group $X-Si(OR^1)_m(R^2)_n$, where the values for m and n are from 0 to 3 and $m+n=3$; R^1 is an alkyl group having from 1 to 6 carbon atoms; R^2 is an alkyl group having from 1 to 16 carbon atoms or a halogen group; and X is a substituent selected from a substituted or unsubstituted aryl, $F_3C(F_2C)_9CH_2-$, the group $NH(Si)(CH_3)_3$; and a saturated or unsaturated alkyl or alkoxy carbonyl having from 6 to 20 carbon atoms.

39. (new) The OFET recited in Claim 38, wherein said silane reagent is selected from $\text{F}_3\text{C}(\text{F}_2\text{C})_9\text{CH}_2\text{-Si}(\text{OCH}_3)_3$; $\text{C}_8\text{H}_{17}\text{Si}(\text{OCH}_3)(\text{CH}_3)_2$; $\text{C}_6\text{H}_5\text{Si}(\text{OCH}_3)_3$; $\text{C}_{18}\text{H}_{37}\text{Si}(\text{OCH}_3)_3$; $\text{CH}_2\text{CH-C}(\text{O})\text{-O}-(\text{CH}_2)_3\text{Si}(\text{OCH}_3)(\text{CH}_3)_2$; $\text{F}_3\text{C}(\text{F}_2\text{C})_9\text{-Si}(\text{Cl})_3$; $\text{Cl-CH}_2\text{SiCl}_2\text{CH}_3$; and $(\text{CH}_3)_3\text{SiNHSi}(\text{CH}_3)_3$.

40. (new) The OFET of Claim 37, wherein said substrate is coated with indium tin oxide.

41. (new) The OFET recited in Claim 40, wherein said substrate comprises polyethylene terphthalate.

42. (new) The OFET recited in Claim 37, further comprising:
a gate electrode on said substrate, wherein said gate dielectric is on said gate electrode;
an organic semiconducting layer on said gate dielectric layer; and
a source electrode and a drain electrode in contact with said organic semiconducting layer.